

REMARKS

Applicants' attorney thanks the Examiner for her comments. Claims 21, 50 and 53 have been amended to indicate that the claimed laminate is an outer cover laminate. Support is found on page 18, last paragraph of the specification. The significance of this amendment is that an outer cover is, by definition, a structure in which the layers are joined together along a continuous interface as shown in Fig. 4. The claimed film and fibrous nonwoven web both form part of the outer cover. A prior art laminate defined by an outer cover which includes only a film, and a bodyside liner which includes a nonwoven web, joined only at the distal edges of the outer cover and bodyside liner, is not an outer cover laminate as claimed.

Claims 21, 50 and 54 have been amended in the Markush group to change the phrase "polyesters of butanediol, adipic acid, succinic acid and/or terephthalic acid" to read "polyester terpolymers of butanediol, adipic or succinic acid, and terephthalic acid." While the polymer is already recited as "biodegradable," polyesters which include only butanediol and terephthalic acid may not be biodegradable without the third comonomer (adipic acid or succinic acid). Thus, the amendment removes a potential ambiguity. The amendment is supported by the original Markush group (i.e., recites polymers within that group) as well as page 6 of the specification (defining "polymers" as including terpolymers) and the paragraph traversing pages 9-10 (listing a specific terpolymer).

Applicants believe the previous claim language requiring the polymer to be biodegradable would necessarily exclude any listed polymer that is not. The amendment is intended only for clarification, by reciting polymers which are commensurate with the scope of the "biodegradable" limitation.

a) Claim Rejection Based On 35 U.S.C. §112

The rejection of Claim 21 under 35 U.S.C. §112, second paragraph, as indefinite, is respectfully traversed. Claim 21 permits the film to have "one or more layers" and requires one layer (which includes polymer and filler) to constitute 50-100% of a thickness of the film. Thus, when the film contains only one layer, the filler-

containing layer is the only layer and constitutes 100% of the thickness. When the film has two or more layers, the filler-containing layer must constitute at least 50% of the film thickness. Claim 21 is clear and definite, and this rejection should be withdrawn.

The Examiner expressed confusion over Applicants' previous argument that Burns, Jr., et al. (U.S. Patent 6,328,723) "does not disclose a breathable film in which one layer includes a mixture of filler particles and biodegradable thermoplastic polymer and constitutes 50-100% of a thickness of the film" (Office Action, pp. 3-4). This argument is correct. Burns, Jr., et al. discloses a two-layer film including an apertured layer and a filled layer. There is no basis for inferring that the filled layer constitutes 50% or more of the total film thickness, and such a relationship is unlikely. A breathable filled film layer is typically thin (in order to have high breathability) whereas an apertured film layer (serving as a structural member) must be thick enough to provide the outer cover with structural integrity, and has no maximum thickness.

b) Claim Rejections Based On Burns, Jr., et al.

The rejection of Claims 53 and 56-58 under 35 U.S.C. §103(a) as obvious over Burns, Jr., and et al. is respectfully traversed. This rejection is mentioned in paragraph 2 of the Office Action (in the "Response To Arguments" section) but is not set forth as a formal claim rejection. For purposes of this response, Applicants have treated the rejection of Claims 53 and 56-58 as a formal claim rejection.

Independent Claim 53 is directed to an outer cover laminate including a breathable film and a fibrous nonwoven web, wherein each film layer includes a biodegradable thermoplastic polymer, and the fibrous nonwoven web includes a biodegradable thermoplastic polymer. Burns, Jr., et al. does not disclose or suggest such a laminate.

The outer cover (backsheet) disclosed in Burns, Jr., and et al. includes two film layers but does not include a fibrous nonwoven web (Col. 3, lines 33-36). The topsheet may include a fibrous nonwoven web (Col. 5, lines 35-40). However, the topsheet is not an "outer cover" as the latter term is understood by persons skilled in the art. Furthermore, the topsheet is not formed of a biodegradable thermoplastic polymer.

Biodegradable thermoplastic polymers are omitted from the list of materials used to form the topsheet nonwoven web (Col. 5, lines 40-45).

The disclosed outer cover (backsheet) includes an apertured film layer 40A and a breathable microporous film layer 40B. No polymer type is listed for the apertured film layer 40A. Several polymer types are listed for the film layer 40B, namely linear low density polyethylene, low density polyethylene, ultra low density polyethylene, high density polyethylene, polypropylene, polyester, polyurethanes, compostable or biodegradable polymers, thermoplastic elastomers, and metallocene catalyst-based polymers (Col. 6, lines 32-46).

In summary, Burns, Jr., et al., does not render Claims 53 and 56-58 obvious because:

- a) no fibrous nonwoven web is disclosed for the outer cover,
- b) no biodegradable thermoplastic polymer is disclosed for a fibrous nonwoven web,
- c) no biodegradable thermoplastic polymer is disclosed for the first film layer of the outer cover, and
- d) nine out of ten polymers disclosed for the second film layer of the outer cover are not biodegradable thermoplastic polymers.

Claims 53 and 56-58 require an outer cover laminate wherein each film layer and a fibrous nonwoven web include a biodegradable thermoplastic polymer. No such laminate is suggested by Burns, Jr., et al. This rejection should be withdrawn:

c) Claim Rejection Based On Takahashi et al.

The rejection of Claims 21-26, 31, 35, 37-39, 41, 44-54 and 56-58 under 35 U.S.C. §103(a) as obvious over U.S. Patent 5,374,259 (Takahashi et al.) is respectfully traversed.

Takahashi et al. discloses a disposable diaper in which biodegradable nonwoven polyester fabric is used both as a liquid permeable surface material (bodyside liner) and as a leakproof backing material (outer cover) (Col. 1, lines 6-13). The reference further discloses that the backsheet may be either a film or a nonwoven cloth of

the biodegradable polyester (Col. 7, lines 9-13 and 61-66), or a laminate of spunbond and meltblown nonwoven webs (Col. 8, lines 20-26). When a nonwoven cloth is employed as the backsheet, the reference teaches that the desired balance of liquid barrier and air permeability can be obtained by proper selection of nonwoven materials and fiber sizes (Col. 8, lines 20-26).

In summary, a film and a nonwoven web are disclosed only in the alternative. The reference does not motivate a person skilled in the art to combine a biodegradable breathable film and a biodegradable nonwoven web to form a breathable outer cover laminate as required by Applicants' independent Claims 21, 50 and 53.

Furthermore, Takahashi et al. does not disclose or suggest any of the biodegradable thermoplastic polymers recited in the Markush group of Applicants' Claims 21 and 50. The biodegradable polyesters disclosed in Takahashi et al. include urethane bonds derived from diisocyanate coupling agents (Col. 3, lines 48-64) and apparently do not employ terephthalic acid. Claims 21 and 50, by contrast, recite biodegradable thermoplastic polymers selected from the group consisting of a) polylactic acid polymers, b) polyester terpolymers of butanediol, adipic or succinic acid, and terephthalic acid, c) polycaprolactone polymers, and d) combinations thereof. Takahashi et al. does not disclose or suggest any of these polymers.

Accordingly, this claim rejection should be withdrawn.

d) Claim Rejection Based On Takahashi et al. In View Of Roberts

The rejection of Claims 40, 42 and 43 under 35 U.S.C. §103(a) as obvious over Takahashi et al. in view of the article by Roberts entitled "Beta-Cyclodextrin Molecules And Their Use In Breathable Barriers" is respectfully traversed. These claims depend from Claim 21 and are patentable for at least the same reasons, explained above. The combined references do not disclose an outer cover laminate which includes a breathable, stretch-thinned barrier film and a fibrous nonwoven web, wherein each film layer and the nonwoven web includes a biodegradable polymer. The combined references also do not disclose a biodegradable thermoplastic polymer selected from the claimed Markush group.

Accordingly, this claim rejection should be withdrawn.

e) Conclusion

Applicants believe that the claims, as now presented, are in condition for allowance. If the Examiner detects any unresolved issues, then Applicants' attorney respectfully requests a telephone call from the Examiner, and a telephone interview.

Respectfully submitted,



Maxwell J. Petersen
Reg. No. 32,772

Pauley Petersen & Erickson
2800 West Higgins Road; Suite 365
Hoffman Estates, Illinois 60195
TEL (847) 490-1400
FAX (847) 490-1403